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Date: August 14, 2002

To: Examiner Jean Wicel Desir

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From: Barry R. Lipsitz

Total Number of Pages, including this page: 5

UNOFFICIAL FAX

Re: US Patent Application No. 09/930,067 - Filed: August 15, 2001
METHOD AND APPARATUS FOR FILTERING INTERFERENCE ...
Our Docket No. GIC-557.1

Dear Examiner Desir:

In accordance with our telephone discussion, enclosed are the claim amendments I would like to discuss with you in an effort to reach agreement as to an allowance of this application. A key difference between the present claims and the prior art is that with the present invention, the signal is filtered at the transmitter to accentuate the signal magnitude at a fixed frequency, and re-filtered at the receiver to attenuate the signal magnitude at the fixed frequency. I cannot find this concept disclosed in the prior art of record.

Per our agreement, I will telephone you at 11:00 AM on Friday, August 16, 2002 to discuss this application.

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office at fax no. 703-872-9314 on:

By: Barry R. Lipsitz August 14, 2002

Respectfully submitted,

Barry R. Lipsitz
Barry R. Lipsitz
Attorney for Applicant

VERSION OF AMENDED CLAIMS WITH MARKINGS
TO SHOW CHANGES MADE

16. (Three times amended) A method for filtering nonlinear distortion in a signal communicated from a transmitter to a receiver via a communication path, comprising the steps of:

[pre-distorting] filtering said signal at the transmitter ~~to accentuate the signal~~ magnitude at a known fixed frequency where said nonlinear distortion resides;

communicating the [pre-distorted] filtered signal to said receiver; and

re-filtering the [pre-distorted] filtered signal at said receiver ~~to attenuate the signal~~ magnitude at said known fixed frequency, wherein said [pre-distorting] filtering and subsequent re-filtering of said signal [at said transmitter] compensates for distortion effects [caused by said filtering] expected at said fixed frequency at said receiver.

17. (Amended) A method in accordance with claim 16 wherein:

said signal is an integrally related carrier (IRC) television channel signal having composite second order (CSO) and composite triple beat (CTB) distortions present at different fixed frequencies; and

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effects of said CSO and CTB distortions are reduced by [pre-distorting] filtering said signal at the transmitter to accentuate the signal magnitude at a first fixed frequency where said CSO distortion resides and a second fixed frequency where said CTB distortion resides, and re-filtering said signal at the receiver to attenuate the signal magnitude at said first and second fixed frequencies.

18. (Amended) A method in accordance with claim 16 wherein:

said signal is a harmonically related carrier (HRC) television channel signal having composite second order (CSO) and composite triple beat (CTB) distortions present at a common fixed frequency; and

effects of said CSO and CTB distortions are reduced by [pre-distorting] filtering said signal at the transmitter to accentuate the signal magnitude at said common fixed frequency and re-filtering said signal at the receiver to attenuate the signal magnitude at said common fixed frequency.

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19. (Three times amended) Apparatus for filtering nonlinear distortion in a signal communicated from a transmitter to a receiver via a communication path, comprising:

a first filter at the transmitter to provide a [pre-distorted] filtered signal having an accentuated magnitude at a fixed frequency where said nonlinear distortion resides; and

a second filter at the receiver adapted to re-filter the [pre-distorted] filtered signal to attenuate the signal magnitude at said fixed frequency.

21. (Three times amended) Apparatus for filtering nonlinear distortion in a signal communicated from a transmitter to a receiver via a communication path, comprising:

a first notch filter at the transmitter having a first transfer function to provide a [pre-distorted] filtered signal having an accentuated magnitude at a known fixed frequency where said nonlinear distortion [resides] is expected to occur; and

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a second notch filter at the receiver having a second transfer function adapted to re-filter the [pre-distorted] filtered signal to attenuate the signal magnitude at said known fixed frequency, thereby filtering out the non-linear distortion and returning the amplitude of the filtered signal to a proper magnitude at the known fixed frequency;

wherein said first transfer function is the inverse of said second transfer function.